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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.	
10/611,843	07/01/2003	Tommy E. White	GP-302711	2769	
7590 08/24/2005			EXAM	EXAMINER	
KATHRYN A MARRA			MORROW, JASON S		
General Motor Mail Code 482		ART UNIT	PAPER NUMBER		
P.O. Box 300			3612		
Detroit, MI 4	8265-3000		DATE MAILED: 08/24/2003	DATE MAILED: 08/24/2005	

Please find below and/or attached an Office communication concerning this application or proceeding.

		Application No.	Applicant(s)			
		10/611,843	WHITE ET AL.			
Office Action Summ	ary	Examiner	Art Unit			
		Jason S. Morrow	3612			
The MAILING DATE of this communication appears on the cover sheet with the correspondence address Period for Reply						
A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION. - Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely. - If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication. - Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).						
Status						
1) Responsive to communication	1) Responsive to communication(s) filed on					
2a)☐ This action is FINAL .	This action is FINAL. 2b)⊠ This action is non-final.					
,	Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under <i>Ex parte Quayle</i> , 1935 C.D. 11, 453 O.G. 213.					
Disposition of Claims						
 4) Claim(s) 1-28 is/are pending in the application. 4a) Of the above claim(s) is/are withdrawn from consideration. 5) Claim(s) is/are allowed. 6) Claim(s) 1-3 and 7-28 is/are rejected. 7) Claim(s) 4-6 is/are objected to. 8) Claim(s) are subject to restriction and/or election requirement. 						
Application Papers						
9) The specification is objected to by the Examiner. 10) The drawing(s) filed on 01 July 2003 is/are: a) accepted or b) objected to by the Examiner. Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a). Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).						
11) The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.						
Priority under 35 U.S.C. § 119						
 12) Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f). a) All b) Some * c) None of: 1. Certified copies of the priority documents have been received. 2. Certified copies of the priority documents have been received in Application No. 3. Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)). * See the attached detailed Office action for a list of the certified copies not received. 						
Attachment(s) 1) Notice of References Cited (PTO-892) 2) Notice of Draftsperson's Patent Drawing 3) Information Disclosure Statement(s) (PT Paper No(s)/Mail Date		4) Interview Summary Paper No(s)/Mail Do 5) Notice of Informal F 6) Other:	(PTO-413) ate. <u>8/11/05</u> . Patent Application (PTO-152)			

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DETAILED ACTION

NOTE: This action is NON-FINAL.

Drawings

The drawings are objected to because the frame members are shown as tubular members 1. when they in fact have a "C" section as shown in figure 2b. Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Objections

2. Claim 1 is objected to because of the following informalities: In line 3, "members" should be changed to --member--. Appropriate correction is required.

Claim Rejections - 35 USC § 102

3. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

- (b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.
- 4. Claims 1-3, 7-9, 11-16, 18, and 19 are rejected under 35 U.S.C. 102(b) as being anticipated by Keahn et al (US Patent Number 3,427,068).

Re claim 1, Keahn et al. discloses a body and frame assembly for a vehicle comprising a one-piece inner member (16) mated with a one-piece outer member (12), the inner member (16) defining door openings (the tops of the door openings, unmarked, but shown at the end of the leadlines for 16 and 14) at opposing sides of the vehicle and the outer member further defining the door openings at the opposing sides of said vehicle, wherein the inner member and the outer member are metal.

Re claim 2, the inner member includes an inner roof panel portion having opposite ends respectively at said opposing sides, a first inner side frame portion (28 extending to 40) at one end and a second inner side frame portion at the opposed end (the identical opposite side of the portion between 28 and 40 not shown in figure 1)), wherein said inner side frame portions extend generally downward from the inner roof panel portion, wherein the outer member includes an

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outer roof panel portion having opposite ends respectively at the opposing sides, a first outer side frame portion (right of 60 in figure 1 extending to the left of 62 in figure 1)) at one end and a second outer side frame portion (the identical opposite side of 12 to that identified above as the first outer side frame portion) at the opposed end, wherein the outer side frame portions extend generally downward from the outer roof panel portion, wherein the first inner and first outer side frame portions substantially define at least one door opening and said second inner and second outer side frame portions substantially define at least one other door opening, and wherein the inner member and the outer member are joined as an assembly.

Re claim 3, the first inner and first outer side frame portions substantially define at least two door openings (there is sufficient space for two doors to be used) and the second inner and second outer side frame portions substantially define at least two other door openings.

Re claim 7, the inner roof panel is characterized by formations (18, 20, 22, 24) configured to provide structural rigidity.

Re claim 8, the inner and outer members define holes (46, 48, and the holes in the outer member for the windshield and the backlight, all of which are trim components) for at least one of door hinges, wiring, and trim components.

Re claim 9, the inner member is formed from a single first rigid sheet and the outer member is formed from a single second rigid sheet (column 1, line 25, the roof is a "hardtop").

Re claim 11, at least one of the inner member and the outer member is formed by quick plastic forming (note these method steps are not given patentable weight in this product claim).

Re claim 12, at least one of the inner member and the outer member is formed by super plastic forming (note these method steps are not given patentable weight in this product claim).

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Re claim 13, at least one of the inner member and the outer member is formed by sheet hydroforming (note these method steps are not given patentable weight in this product claim).

Re claim 14, the inner member and the outer member are joined at least partially by hemming (note these method steps are not given patentable weight in this product claim).

Re claim 15, the inner member and the outer member are joined at least partially by welding (note these method steps are not given patentable weight in this product claim).

Re claim 16, the inner member and the outer member are joined at least partially by bonding (note these method steps are not given patentable weight in this product claim).

Re claim 18, the inner member has an outer face and the inner member and the outer member are sufficiently contiguous and coextensive with each other such that the outer member substantially covers the outer face of the inner member (see figure 1).

Re claim 19, Keahn et al. discloses a body and frame assembly for a vehicle comprising an integral inner member including an inner roof panel portion (18, 20, 22, 24) having opposite ends respectively at opposing sides of the vehicle, a first inner side frame portion (at 28) at one end and a second inner side frame portion (the part to that shown at 28 and hidden in figure 1) at the opposed end, wherein the inner side frame portions extend generally downward from the inner roof panel portion and an integral outer member matable with the inner member including an outer roof panel portion (12) having opposite ends respectively at the opposing sides of the vehicle, a first outer side frame portion (just behind 60 in figure 1) at one end and a second outer side frame portion at the opposed end (the opposite to the portion just behind 60 and hidden in figure 1), wherein the outer side frame portions extend generally downward from the outer roof panel portion, wherein the first inner and first outer side frame portions substantially define at

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least one door opening and the second inner and second outer side frame portions substantially define at least one other door opening, and wherein the inner member and the outer member are joined as an assembly.

Claim Rejections - 35 USC § 103

- 5. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 6. Claims 10 and 17 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keahn et al. in view of Hanyu (U.S. Patent Number 6,485,089).

Keahn discloses all the limitations of the claims, as applied above, except for the inner and outer members being aluminum.

Hanyu teaches the use of aluminum in construction a vehicle body and frame (column 2, line 54).

It would have been obvious to one of ordinary skill in the art at the time the invention was made to construct inner and outer members, such as those disclosed by Keahn et al., from aluminum, as taught by Hanyu, in order to provide a lighter vehicle and thus increase the fuel economy of the vehicle.

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7. Claims 20-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Keahn et al. in view of Saunders et al. (US Patent Number 5,974,847).

Keahn et al. discloses all the limitations of the claims, as applied above, except for the use of quick plastic forming, super plastic forming, or hydroforming.

Saunders et al. teaches the use of super plastic forming in the construction of metal automotive parts.

It would have been obvious to one of ordinary skill in the art at the time the invention was made to modify method, such as that disclosed by Keahn et al., to include the use of super plastic forming, as taught by Saunders et al., in order to provide high quality parts during manufacture (see Saunders et al., column 2, line 33).

Allowable Subject Matter

8. Claims 4-6 are objected to as being dependent upon a rejected base claim, but would be allowable if rewritten in independent form including all of the limitations of the base claim and any intervening claims.

Response to Arguments

9. Applicant's arguments with respect to claims 1-28 have been considered but are moot in view of the new ground(s) of rejection.

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Conclusion

10. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Jason S. Morrow whose telephone number is (571) 272-6663. The examiner can normally be reached on Monday-Friday, 8:00a.m.-4:30p.m..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn Dayoan can be reached on (571) 272-6659. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

Jason S. Morrow Primary Examiner

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August 17, 2005

PRIMARY PATENT EXAMINER

8/17/05